



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,033	06/25/2001	Howard H. Liebermann	30-4698US/11872-026001	9448

7590

05/12/2003

Roger H Criss  
Honeywell International Incorporated Law Dept.  
101 Columbia Road  
Morristown, NJ 07962

EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 05/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/891,033

Applicant(s)

ORLOFF ET AL.

Examin r

George P Wyszomierski

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/8/03 (RCE, Amendment).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

Art Unit: 1742

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Narasimhan (U.S. Patent 4,332,848).

Narasimhan discloses glassy metal strips having a composition within the limitations of instant claim 4 and which contain a repeating geometrical pattern of structurally defined protuberances and/or indentations. The preferred depth in Narasimhan is as much as 10 times the thickness of the strip; see Narasimhan column 7, line 60. With regard to the “application of selected forces that induce permanent deformation” as claimed, the force of the molten metal in Narasimhan hitting the contoured surface of the casting mechanism would appear to meet this limitation. With respect to claims 6-9, the examiner’s position is that the suitability of a material for abrasive or cutting purposes is directly related to its composition, shape, and relative hardness to the material being abraded or cut. Because all of these parameters are the same in the prior art or the claimed invention, the examiner’s position is that the claimed limitations are

Art Unit: 1742

inherent in the Narasimhan material. Thus all aspects of the claimed invention appear to be fully met by Narasimhan.

It appears to be Applicant's intent that the claimed "forces that induce permanent deformation" are forces that the material has been subjected to subsequent to solidifying, as opposed to any forces during solidification as described in the preceding paragraph. This difference would imply a difference in the process by which the claimed products are made, as opposed to any difference between the actual products and those of Narasimhan. It is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524). In the present case, Applicant has not met this burden, and the claimed products are held to be at best obvious variants of those disclosed by Narasimhan.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan in view of Watanabe et al. (U.S. Patent 5,622,768) or Sato et al. (U.S. Patent 4,865,664).

The Narasimhan products do not appear to contain element "Z" as defined in instant claim 5. The Watanabe and Sato et al. patents indicate that it is conventional in the art to include element "Z" in amorphous alloy strip compositions, in the amounts as defined in the instant claim. Consequently, the Watanabe or Sato disclosures would have motivated one of ordinary skill in the art to produce the Narasimhan products containing an amount of element "Z" as defined in the present claims.

Art Unit: 1742

4. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan in view of either Watanabe et al. or Bruckner (U.S Patent 4,853,292).

The Narasimhan patent does not discuss a plurality of stacked materials or transformer cores, as required by the instant claims. Both Watanabe and Bruckner indicate it to be conventional in the art to form laminated magnetic cores by using a plurality of layers of amorphous metal alloys. These disclosures would have motivated one of ordinary skill in the art to form the materials disclosed by Narasimhan into the configurations as set forth by Watanabe or Bruckner.

5. In the Amendment and remarks filed April 8, 2003, Applicant alleges that the claimed products possess an absence of internal stresses or superior magnetic properties as compared to the prior art, that the claimed products have "non-periodic geometrical articulations", and/or that the claimed products allow "preservation of strip flatness". Applicant's arguments have been carefully considered, but are not persuasive of patentability because:

a) With regard to internal stresses or magnetic properties, Applicant refers to a discussion in general (e.g. by Luborsky) of the effects of rolling of amorphous ribbons, but has not shown any specific difference in any measurable property of the claimed materials as opposed to the comparable property of the Narasimhan materials.

b) With regard to non-periodic articulations, most of the instant claims contain no limitation of this aspect of the invention, and the only claim that does (claim 3) specifically recites geometrically repeating articulated definitions, i.e. the opposite of a non-periodic articulation.

c) With regard to strip flatness, Applicant's argument appears to be that if one quenches material on a wheel as in Narasimhan Figure 2, then the material would have a curved surface

Art Unit: 1742

that would need to be flattened in order to stack the materials (i.e. as in claims 11-13).

However, such an argument would be irrelevant to a material as quenched on a belt, as in Narasimhan Figure 3.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for this Group is (703) 872-9310 for all correspondence except for After Final amendments in which case the Fax number is (703) 872-9311. The Right fax number for this examiner is (703) 872-9039. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



GEORGE WYSZOMIERSKI  
PRIMARY EXAMINER

GPW  
May 2, 2003